

WHAT IS CLAIMED IS:

1. An apparatus for applying glue, said apparatus comprising:
an outer conduit having at least one outer conduit orifice;
an inner conduit surrounded by said outer conduit and defining a
first channel therebetween whereby glue is supplied to said inner conduit and
5 water is supplied to said first channel, said outer conduit and said inner conduit
being slideably engaged with each other, and said inner conduit having at least
one inner conduit orifice;
at least one spray nozzle in communication with said at least one
outer conduit orifice; and
10 a slide conduit orifice valving providing selective communication
of said outer conduit orifice with said inner conduit orifice or with said first
channel.
2. The apparatus of claim 1, wherein said slide conduit orifice valving
comprises an intermediate conduit disposed between said inner conduit and
said outer conduit and secured relative to said inner conduit for movement
therewith, said intermediate conduit having a water orifice in communication
5 with said first channel and a glue orifice in communication with said inner
conduit orifice, whereby relative movement of said inner and intermediate
conduits relative to said outer conduit is used to selectively align said outer
conduit orifice to said glue orifice, to said water orifice or to neither said glue or
water orifice.
3. The apparatus of claim 2, wherein a second channel is formed
between said outer conduit and said intermediate conduit to which water is
supplied.
4. The apparatus of claim 3, further comprising a water circulation
system for supplying water to said first channel and said second channel.

5. The apparatus of claim 4, wherein said water circulation system includes a heat exchanger which provides water at a desired water temperature to assist in maintaining the glue at a desired glue temperature.
6. The apparatus of claim 1, further comprising a glue system for circulating glue through the inner conduit.
7. The apparatus of claim 6, wherein said glue circulation system includes a heat exchanger for maintaining the glue at a desired glue temperature.
8. The apparatus of claim 1, further comprising a water circulation system for supplying water to said first channel.
9. The apparatus of claim 8, wherein said water circulation system includes a heat exchanger which provides water at a desired water temperature to assist in maintaining the glue at a desired glue temperature.
10. The apparatus of claim 1, further comprising a stop valve disposed between said at least one spray nozzle and said outer conduit orifice.

11. An apparatus for applying glue, said apparatus comprising:
an outer conduit surrounding an inner conduit which said inner
conduit is supplied with glue, said outer conduit having at least one outer
conduit orifice and said inner conduit having at least one inner conduit orifice;
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an intermediate conduit disposed between said inner conduit and
said outer conduit, said intermediate conduit defining a first water channel
between said intermediate conduit and said inner conduit and a second water
channel between said outer conduit and said intermediate conduit, being
secured relative to said inner conduit for movement therewith, having a water
10 orifice in communication with said first channel and said second channel, and a
glue orifice in communication with said inner conduit orifice, whereby relative
movement of said inner and intermediate conduit relative to said outer conduit
is used to selectively align said outer conduit orifice with said glue orifice, with
said water orifice or with neither said glue or water orifice;
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a glue circulation system for circulating glue through the inner
conduit;
a water circulation system for supplying water to said first channel
and said second channel; and
at least one spray nozzle in communication with a respective said
20 at least one outer conduit orifice.

12. The apparatus of claim 11, wherein:
said at least one outer conduit orifice comprises a plurality of outer
conduit orifices; and
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said at least one nozzle comprises a plurality of nozzles, each
associated with a respective one of said plurality of outer conduit orifices.

13. The apparatus of claim 12, further comprising a respective stop valve disposed between each of said nozzles and each respective said outer conduit orifice.

14. The apparatus of claim 11, wherein said water circulation system includes a heat exchanger which provides water at a desired water temperature to assist in maintaining the glue at a desired glue temperature.

15. The apparatus of claim 11, wherein said glue circulation system includes a heat exchanger for maintaining the glue at a desired glue temperature.

16. A method for applying glue to a workpiece, said method comprising:

circulating glue through an inner conduit at a desired glue temperature;

5 circulating water through a channel defined between the inner conduit and an intermediate conduit at a desired temperature, the intermediate conduit having a glue orifice in communication with the glue and a water orifice in communication with the water;

10 selectively aligning an outer conduit orifice of an outer conduit with the glue orifice, the water orifice or neither orifice of the intermediate conduit whereby either glue, water or neither is supplied to the outer conduit orifice;

15 applying glue to the workpiece when the outer conduit orifice is aligned with the glue orifice by supplying glue from the inner conduit, through the glue orifice, the outer conduit orifice and out a nozzle associated with the outer conduit orifice; and

purging glue from the nozzle when the outer conduit orifice is aligned with the water orifice by supplying water from the first channel and the second channel through the outer conduit orifice and out the nozzle.

17. The method of claim 16, wherein there are a plurality of said nozzles.

18. A method for applying glue to a workpiece, said method comprising the steps of:

circulating glue through an inner conduit at a desired glue temperature;

5 circulating water through a first channel formed between the inner conduit and an intermediate conduit, and through a second channel formed between an outer conduit and the intermediate conduit, the intermediate conduit having a glue orifice in communication with the glue and a water orifice in communication with the water;

10 selectively aligning an outer conduit orifice of the outer conduit the glue orifice, the water orifice or neither orifice of the intermediate conduit by sliding the outer conduit relative to the intermediate conduit whereby either glue, water or neither is supplied to the outer conduit orifice;

15 applying glue to the workpiece when the outer conduit orifice is aligned with the glue orifice by supplying glue from the inner conduit, through the glue orifice, the outer conduit orifice and out a nozzle associated with the outer conduit orifice; and

20 purging glue from the nozzle when the outer conduit orifice is aligned with the water orifice by supplying water from the first channel and the second channel through the outer conduit orifice and out the nozzle.